

Amendments to the Claims

Claims 1-6 (Cancelled).

Claim 7 (Currently amended): An apparatus for converting rotational movement against a surface into electrical energy, comprising:

a tire body;

the tire body having an outer wall for contact with the surface and opposite sidewalls;

the tire body comprising a plurality of radial plys;

at least one pad integrated between the radial plys to produce an electrical current as the outer wall of the tire body is in rotational movement against the surface.

Claim 8 (Original): The apparatus of claim 7 further comprising a wheel associated with the tire body, the tire body mounted to the wheel.

Claim 9 (Original): The apparatus of claim 7 wherein the pad comprises a ceramic material.

Claim 10 (Original): The apparatus of claim 7 wherein the pad comprises a polymeric film material.

Claim 11 (Original) The apparatus of claim 7 wherein the pad comprises a plurality of layers and a plurality of voids between the layers.

Claim 12 (Currently amended): The apparatus of claim 8 further comprising an electrical connection between each of the at least one pad and a circuit ~~position~~positioned on the wheel.

Claim 13 (Original): The apparatus of claim 12 wherein the circuit portion includes an operational amplifier.

Claim 14 (Original): A vehicle, comprising:

a vehicle body;

a plurality of wheels operatively connected to the vehicle body;

at least one of the wheels comprising a tire body having an outer wall and opposite side walls, the tire body comprising a plurality of radial plies, and at least one pad integrated between the radial plies for converting force against the tire associated with movement of the tire into electrical energy.

Claim 15 (Original): The vehicle of claim 14 wherein the vehicle body is a golf cart body.

Claim 16 (Original): The vehicle of claim 14 wherein the at least one pad produces electrical energy in response to changes in thickness and not changes in strain.

Claim 17 (Original): The vehicle of claim 16 wherein the at least one pad is formed from a plurality of layers of polymeric film.

Claim 18 (New): An apparatus for converting rotational movement against a surface into a electrical energy, comprising:

a tire body;

the tire body having an outer wall for contact with the surface and opposite side walls;

the tire body comprising a plurality of radial plies;

a flexible material integrated between the radial plies to produce electrical energy;

wherein the flexible material is in direct contact with the outer wall.